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PCT/IB 04 / 00191

12.02.04 Certificate

REPUBLIEK VAN SUID-AFRIKA

PATENT OFFICE
DEPARTMENT OF TRADE AND
INDUSTRY

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REC'D 09 MAR 2004

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the documents annexed hereto are true copies of:

Application forms P.1 and P.3, provisional specification and drawings
of South African Patent Application No. 2003/5926 as originally filed
in the Republic of South Africa on 31 July 2003 in the name of
BEYERS, JAN GEORG SOLMS for an invention entitled:
"A DEVICE FOR THE REPAIR OF PITCH MARKS ON A
GOLF GREEN".

Geteken te
Signed at
PRETORIA

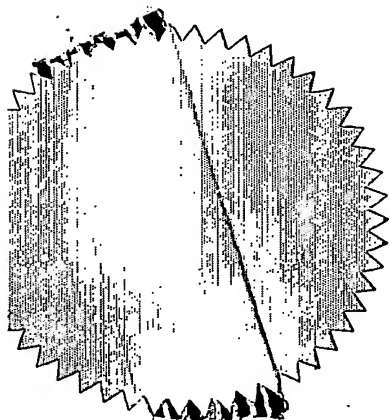
in die Republiek van Suid-Afrika, hierdie
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dag van
5th February 2004
day of


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**PRIORITY
DOCUMENT**

SUBMITTED OR TRANSMITTED IN
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THE GRANT OF A PATENT IS HEREBY REQUESTED BY THE UNDERMENTIONED APPLICANT
ON THE BASIS OF THE PRESENT APPLICATION FILED IN DUPLICATE **INCOMPLETE**

A & A REF: V15849

BEYERS, Jan Georg Solms

Farm Kromrivier, Caledon, 7230, Republic of South Africa

A DEVICE FOR THE REPAIR OF PITCH MARKS ON A GOLF GREEN

☐ THE APPLICATION CLAIMS PRIORITY AS SET OUT ON THE ACCOMPANYING FORM P.2
The earliest priority claimed is Country: No: Date:

☐ THE APPLICATION IS FOR A PATENT OF ADDITION TO PATENT APPLICATION NO. | 21 | 01 |

☐ THIS APPLICATION IS FRESH APPLICATION

IN TERMS OF SECTION 37 AND BASED ON APPLICATION NO. | 21 | 01 |

THIS APPLICATION IS ACCOMPANIED BY

- 21 01
- REGISTRAR OF PATENTS DESIGNS,
TRADE MARKS AND COPYRIGHT
- 2003-07-31
- REGISTRAR VAN PATENTE, MODELLE,
HANDELSMERKE EN OUTEURSREG
- OFFICIAL DATE STAMP

DATED THIS 30th DAY OF July 2003

ADAMS & ADAMS
APPLICANTS PATENT ATTORNEYS

The duplicate will be returned to the applicant's address for service as proof of lodging but is not valid unless endorsed with official stamp.

**REGISTERED
DE GEMERKE
HANDSLED**

OFFICIAL DATE STAMP

REGISTRAR OF PATENTS

REPUBLIC OF SOUTH AFRICA
PATENTS ACT, 1978
DECLARATION AND POWER OF ATTORNEY
(Section 30 - Regulation 8, 22(i)(c) and 33)

FORM P.3

PATENT APPLICATION NO		A&A Ref: V15849 PP/tk	LODGING DATE	
21	01	2003/5926	22	31 JULY 2003

FULL NAME(S) OF APPLICANT(S)	
71	BEYERS, Jan Georg Solms

FULL NAME(S) OF INVENTOR(S)	
72	BEYERS, Jan Georg Solms

EARLIEST PRIORITY CLAIMED	COUNTRY	NUMBER	DATE
	33	NIL	31
			32
			NIL

NOTE: The country must be indicated by its International Abbreviation - see schedule 4 of the Regulations

TITLE OF INVENTION	
54	A DEVICE FOR THE REPAIR OF PITCH MARKS ON A GOLF GREEN

* I/we **BEYERS, Jan Georg Solms**

hereby declare that :-

1. I/we am/are the applicant(s) mentioned above;
- ** 2. ~~I/we have been authorized by the applicant(s) to make this declaration and have knowledge of the facts herein stated in the capacity of~~ of the applicant(s);
- *** 3. the inventor(s) of the abovementioned invention is/are the person(s) named above and the applicant(s) has/have acquired the right to apply by virtue of an assignment from the inventor(s);
4. to the best of my/our knowledge and belief, if a patent is granted on the application, there will be no lawful ground for the revocation of the patent;
- **** 5. ~~this is a convention application and the earliest application from which priority is claimed as set out above is the first application in a convention country in respect of the invention claimed in any of the claims; and~~
6. the partners and qualified staff of the firm of **ADAMS & ADAMS**, patent attorneys, are authorised, jointly and severally, with powers of substitution and revocation, to represent the applicant(s) in this application and to be the address for service of the applicant(s) while the application is pending and after a patent has been granted on the application.

SIGNED THIS **9th** DAY OF **JULY 2003**

BEYERS, Jan Georg Solms

(no legalization necessary)
In the case of application in the name of a company, partnership or firm, give full names of signatory/signatories, delete paragraph 1, and enter capacity of each signatory in paragraph 2.
If the applicant is a natural person, delete paragraph 2.
If the right to apply is not by virtue of an assignment from the inventor(s), delete "an assignment from the inventor(s)" and give details of acquisition of right.
For non-convention applications, delete paragraph 5.

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PRETORIA

FORM P.6

REPUBLIC OF SOUTH AFRICA
Patents Act, 1978

PROVISIONAL SPECIFICATION

(Section 30(1) - Regulation 27)

OFFICIAL APPLICATION NO.

21 01

... 2003 / 5926

LODGING DATE

22

31 July 2003

FULL NAME(S) OF APPLICANT(S)

71

BEYERS, Jan Georg Solms

FULL NAME(S) OF INVENTOR(S)

72

BEYERS, Jan Georg Solms

TITLE OF INVENTION

54

A DEVICE FOR THE REPAIR OF PITCH MARKS ON A GOLF GREEN

THIS INVENTION relates to a method and a device for the repair of pitch marks on a golf green.

When a golf ball lands on a green, the golf ball causes a dent commonly referred to as a pitch mark. In many instances the grass in the pitch mark is irreparably damaged by the ball. In some instances, a grass layer may be removed from the turf where the ball pitches. A common method employed to repair pitch marks is to insert the shank of a golf tee or the tines of a pitch mark repair fork into the turf surrounding the pitch mark and to pry the turf near the surface of the pitch mark towards the area of the dent to fill in the dent. This method of repairing a pitch mark is unsatisfactory as the damaged grass is not repaired but merely raised to the surface. In order for the damaged grass layer of the pitch mark to be

restored, new grass will have to replace the damaged grass. This process may take a few weeks to occur.

According to a first aspect of the invention there is provided a method of repairing a pitch mark on a golf green including:

pushing the damaged turf of the pitch mark, downwardly into the green with a pushing tool, so as to deepen the depression of the pitch mark;

inserting an elongate tine into the turf surrounding the depressed pitch mark, at a position spaced slightly outwardly from the periphery of the depressed pitch mark so as to leave a region of healthy grass between the tine and the depressed pitch mark;

urging the turf with a healthy grass layer thereon inwardly into the depressed pitch mark by levering the tine towards the inside of the depressed pitch mark about a fulcrum defined at the lower end of the tine, thereby to fill the pitch mark with said turf having a healthy grass layer thereon.

The method may include repeatedly inserting and levering the tine towards the inside of the depressed pitch mark at positions surrounding the pitch mark, until the pitch mark is completely filled in with turf having a healthy grass layer thereon.

The method may include levelling the filled-in pitch mark and its periphery by compressing it.

The method may include inserting the tine at an angle of approximately 65° relative to the surface of the green.

The method may include inserting the tine approximately 10 mm away from the edge of the depressed pitch mark.

The method may include pushing the pushing tool into the damaged turf of the pitch, to a depth of approximately 20mm below the surface of the green surrounding the pitch mark.

The pushing tool may define a tapering formation and thus the depressed pitch mark may define a tapering recess when the damaged turf has been pushed into the green.

The tapering formation may be stepped and thus the pitch mark may define a stepped tapering recess when the damaged turf has been pushed into the green.

According to another aspect of the invention there is provided a pitch mark repair device for use in repairing a pitch mark on a golf green, including:

a pushing tool for pushing damaged turf of the pitch mark downwardly into the green so as to deepen the depression of the pitch mark; and

a restoring tool that is connected to the pushing tool and that has at least one elongate tine that can be inserted into the turf surrounding the depressed pitch mark, at a position spaced slightly outwardly from the periphery of the depressed pitch mark so as to leave a region of healthy grass between the tine and the depressed pitch mark and that can be levered towards the inside of the depressed pitch mark, thereby to fill the pitch mark with turf having a healthy grass layer thereon, in use.

The restoring tool may be hingedly connected to the pushing tool and hingedly displaceable between an extended position wherein the tine of the restoring tool projects outwardly from the pitch mark repair device and a folded position

wherein the tines is folded into the pitch mark repair device in a "jack knife" like configuration.

The pushing tool may define a tapering formation.

The tapering formation may be stepped.

The tapering formation may define a taper angle of approximately 65°.

The pushing tool may include a handle formation.

The pushing tool may include a stop formation located thereon that stops the pushing tool penetrating the green after a predetermined length of pushing tool has penetrated the green.

The pitch mark repair device may include a securing clip.

This invention extends to a pushing tool substantially as described hereinabove separate and apart from the pitch mark repair device.

Further features of the invention are described hereinafter by way of a non-limiting example of the invention, with reference to and as illustrated in the accompanying diagrammatic drawings. In the drawings:

Figure 1 shows a schematic side view of a pitch mark repair device in accordance with the invention;

Figure 2 shows a schematic sectional side view of a pitch mark on a golf green;

Figure 3 shows a schematic sectional side view of the pitch mark repair device of Figure 1 wherein the pitch mark of Figure 2 has been pushed downwardly into the pitch mark so as to deepen the depression of the pitch mark;

Figure 4 shows a schematic sectional side view of the pitch mark repair device of Figure 1, illustrating the manner in which the tines of the pitch mark repair device are inserted into the green surrounding a depressed pitch mark to be repaired; and

Figure 5 shows a schematic sectional side view of the pitch mark repair device of Figure 1 being levered to fill a depressed pitch mark.

With reference to the drawings, a pitch mark repair device in accordance with the invention is designated generally by reference numeral 10. The pitch mark repair device 10 includes a pushing tool 12 and a restoring tool 14.

The pushing tool 12 is of moulded synthetic plastics material and comprises a pushing formation 16 and a handle 18 that is formed integrally with the pushing formation. The pushing tool 12 has a generally elongate configuration, with the pushing formation 16 projecting from one end of the handle 18. The handle 18 defines a stop in the form of a flange 20 from which the pushing formation 16 projects. The distance from the distal end of the pushing formation to the flange 20 is 21 mm. The pushing formation 16 is stepped and generally tapered to define a taper angle of approximately 65°. The handle 18 includes a utility clip 22 so that the pitch mark repair device 10 can easily be carried on a person.

The restoring tool 14 comprises two tines hingedly connected to the pushing tool 12 by means of a pivot pin 24. The restoring tool 14 is hingedly displaceable between an extended position wherein the tines 28 project outwardly from pushing tool 12 and a folded position wherein the tines 28 are folded into the

pushing tool 12 in a "jack knife" like configuration (as is shown in broken lines in Figure 1).

In use, to repair a pitch mark 30, the tapering formation 16 of the pushing tool 12 is pushed downwardly into the pitch mark 30. The tapering formation 16 pushes the damaged grass of the pitch mark 30 into the green, forming a depressed pitch mark 32 of stepped and generally tapered configuration (as shown in Figure 3 of the drawings). The flange 20 stops the pushing formation 16 from going deeper than 21 mm into the green. The restoring tool is then hingedly unfolded about the pivot pin 24, so that the tines 28 project outwardly. The tines of the restoring tool 14 are inserted into the turf surrounding the depressed pitch mark 32 at an angle of approximately 65° and spaced approximately 10 mm away from the edge of the depressed pitch mark. A region of healthy grass 36 is located between the restoring tool 14 and the depressed pitch mark 32. By manipulating the handle 18 towards the inside of the depressed pitch mark, the tines 28 are levered about a fulcrum 34 defined in the turf at the lower end of the tines 28 (as is shown in Figure 5 of the drawings). The turf having a layer of healthy grass thereon that is located in the region between the tines 28 and the depressed pitch mark 32, is displaced into the depressed pitch mark 32 by the levering action. The tines 28 are repeatedly inserted and levered at different positions surrounding the pitch mark, until the pitch mark 32 is completely filled with healthy turf. The surface of the filled-in pitch mark is then gently tapped down to make the surface of the pitch mark level with the surface of the surrounding green.

By filling in the depressed pitch mark with turf having a healthy layer of grass thereon, the green in the region of the pitch mark, is restored completely.

It will be appreciated that the pitch mark repair device may be suitable for use in repairing pitch marks on a golf fairway. It is envisaged by the applicant that the pitch mark repair device may be used also for repairing divots in a golf fairway in

a manner similar to that described and defined herein above. In this instance, the pitch mark repair device will be designed with an enlarged pushing tool and restoring tool to make it suitable for use in repairing divots.

DATED THIS 30TH DAY OF JULY 2003

A handwritten signature, likely of a representative of Adams & Adams, is written over a horizontal line.

ADAMS & ADAMS

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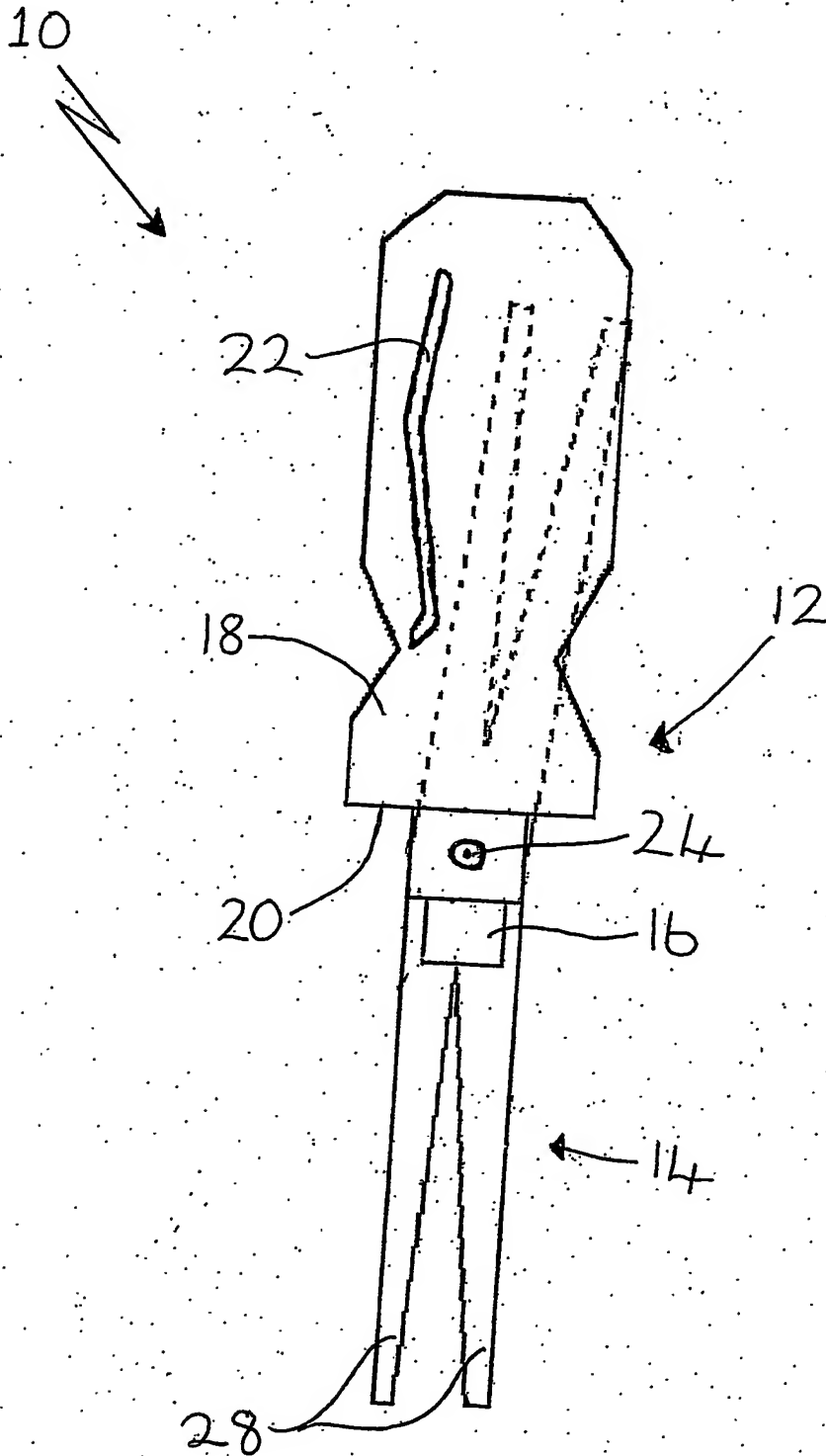


FIGURE.1

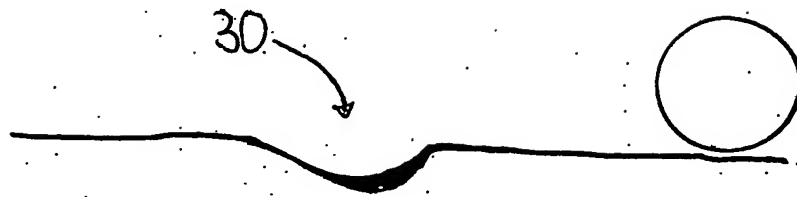


FIGURE. 2

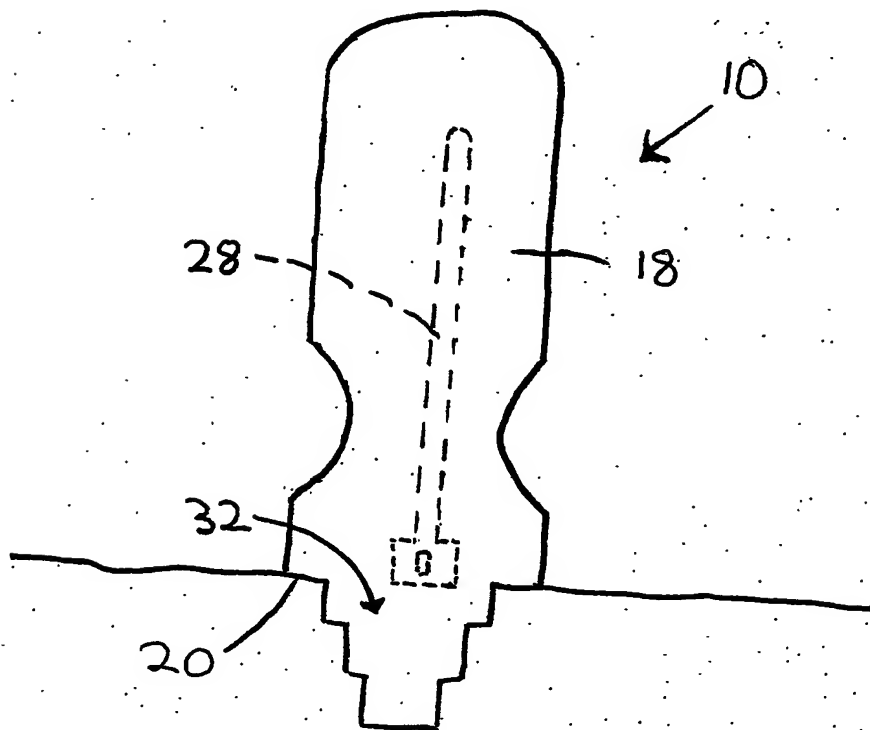


FIGURE. 3

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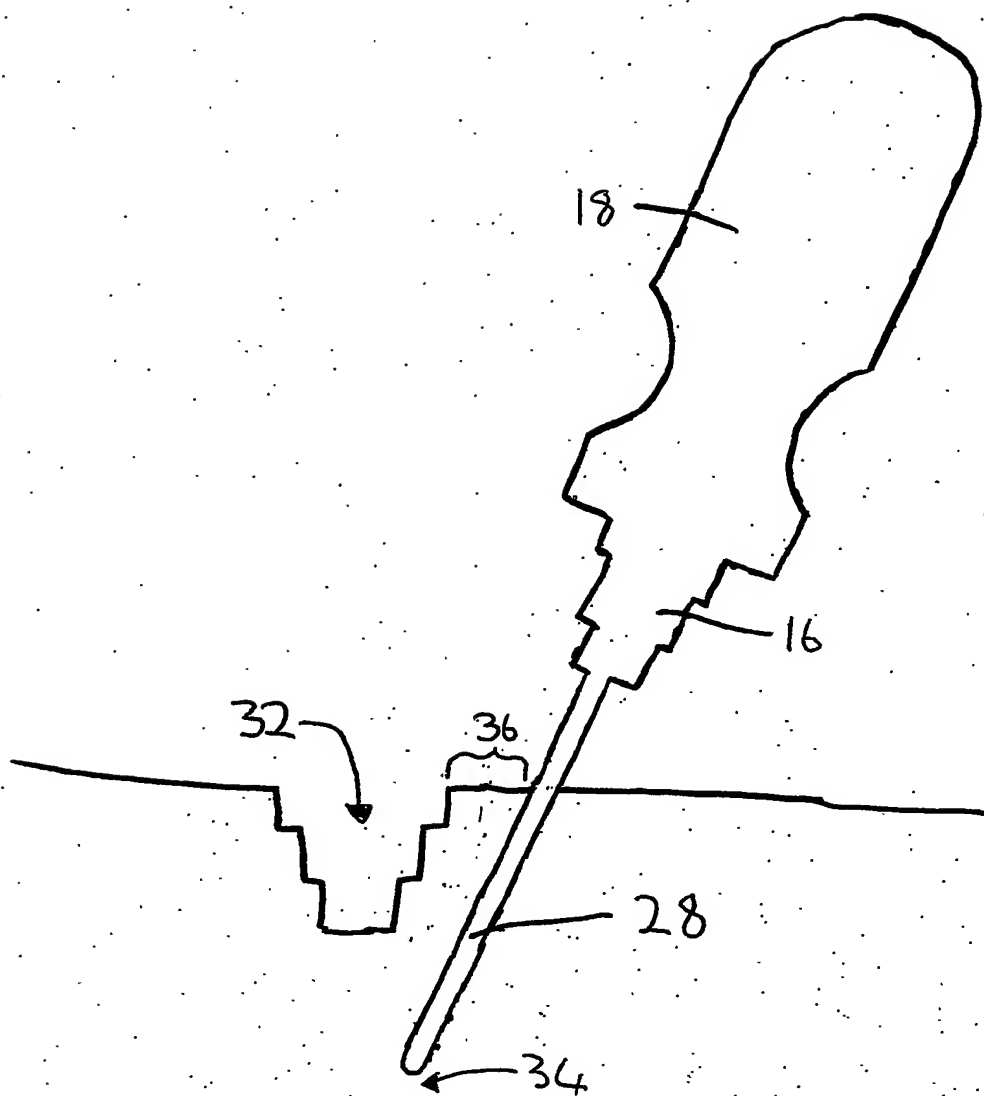


FIGURE. 4

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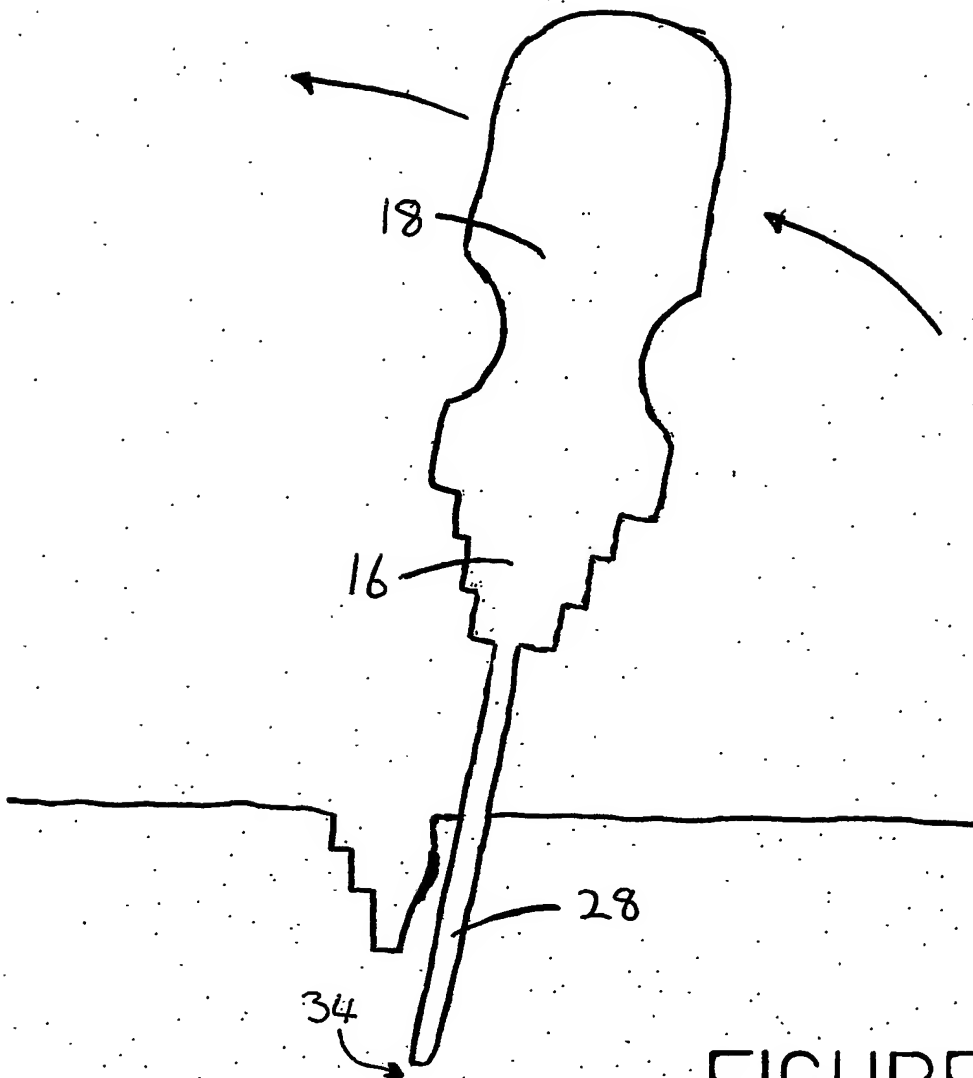


FIGURE. 5

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